

REMARKS

Claims 1 and 3-6 were pending prior to this amendment. Claim 1 has been further amended to recite “wherein the reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof.”

Therefore, claims 1 and 3-6 are currently pending.

Rejections under 35 U.S.C. § 102(b)

I. In the Office Action of January 9, 2006, claims 1, 3 and 5-6 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 4,579,662 to Jonsson (the ‘662 patent’). According to the Office Action, the ‘662 patent discloses all the elements of the rejected claims other than “for the continuous liquid phase modification and/or conjugation of proteins, purification and concentration thereof.” This phrase was categorized by the Patent Office as an intended use rather than a feature of the claimed system and was considered not to be a patentable distinction.

Claim 1 has been amended to further require that the reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof. The ‘662 patent does not disclose a system in which a reaction vessel comprises a protein and a reactant for modification and/or conjugation of the protein as required in pending claim 1. Pending claims 3 and 5-6 depend from claim 1 and thus also recite the requirement that the reaction vessel contain a reactant for modification and/or conjugation of the protein.

Therefore, the rejection of claims 1, 3 and 5-6 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by the ‘662 patent cannot be applied to claims 1, 3 and 5-6 as currently pending and must be withdrawn.

II. In the Office Action, claims 1 and 4-6 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 4,986,918 to Breslau (“the ‘918 patent”). Again, the Patent Office argues that the cited patent discloses all the elements of the rejected claims other than an intended use.

As stated above, claim 1, and by dependence, claims 4-6 have been amended to further require that the reaction vessel comprises a protein and a reactant for modification and/or

conjugation thereof. Nowhere in the '918 patent is there any disclosure of a system in which a reaction vessel comprises a protein and a reactant for modification and/or conjugation of the protein.

Therefore, the rejection of claims 1 and 4-6 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by the '918 patent cannot be applied to claims 1 and 4-6 and must be withdrawn.

III. Further, in the Office Action, claims 1 and 4-6 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 5,342,863 to Buckley ("the '863 patent"), citing the only distinction from the claimed invention as an intended use, as described above.

Again, as stated above, claim 1, and by dependence, claims 4-6 have been amended to further require that the reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof. Nowhere in the '863 patent is there any disclosure of a system in which a reaction vessel comprises a protein and a reactant for modification and/or conjugation of the protein.

Therefore, the rejection of claims 1 and 4-6 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by the '863 patent cannot be applied to claims 1 and 4-6 and must be withdrawn.

Rejections under 35 U.S.C. § 103(a)

IV. Claims 1, 3 and 5 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable for obviousness over U.S. Patent 5,262,053 to Meier in view of U.S. Patent 5,260,065 (sic): U.S. Patent 5,260,605 to Møller.

According to the argument advanced by the Patent Office, it would have been obvious to modify the apparatus described in Meier to add a backwash reservoir analogous to the backwash tank of Møller (citing U.S. Patent 5,260,605 at Fig.1; col. 5, lines 64-65; col. 11, lines 21-58; and col. 13, lines 13-48).

Applicants note that even if the Meier and Møller inventions are combined, the combination does not disclose a system comprising a reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof.

Therefore, Applicants maintain that the combination of the disclosures of U.S. Patent 5,262,053 to Meier and U.S. Patent 5,260,605 to Møller fails to reach the invention of claims 1, 3 and 5 and must be withdrawn.

V. At page 4 of the Office Action, claims 1, 5 and 6 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable for obviousness over Amicon Publication 750 in view of the '918 patent to Breslau. However, the remainder of the rejection at pages 5-6 relates to the combination of Amicon Publication 750 in view of the Møller patent '605. Furthermore, the citations include a reference to col. 11, which does not exist in Breslau. Therefore, Applicants treat the rejection as being in view of Møller.

According to the Office Action, claim 1 differs from the disclosure of the Amicon Publication 750 in the recitation of an element listed as "a backwash reservoir being fluidly connected to the ultrafiltration means." This element is allegedly supplied by the backwash tank (18) of Møller. Further, according to the Office Action, the inventions of claims 5 and 6 are obvious over the above-described combination, including the Amicon Publication 750 figures 1-2, wherein the ultrafiltration device is connected to the permeate reservoir.

Applicants maintain that even if the Amicon Publication 750 and the Møller disclosures are combined, the combination does not disclose a system comprising a reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof.

Therefore, Applicants assert that the combination of the disclosures of Amicon Publication 750 and U.S. Patent 5,260,605 to Møller fails to reach the invention of claims 1, 5 and 6, and so must be withdrawn.

VI. Claims 1, 4 and 6 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable for obviousness over Amicon Brochure: Re Spiral Wound/Hollow Fiber System in view of U.S. Patent 5,260,605 the '605 patent to Møller. According to the Examiner, claim 1 differs from the disclosure of the Amicon Brochure in the recitation of an element listed as "a backwash reservoir being fluidly connected to the ultrafiltration means." This element is allegedly supplied by the backwash tank of the '918 patent.

Similarly, claim 4 is alleged to be obvious as detailed above with the addition of the disclosure of the Amicon Brochure of the spiral-wound/hollow fiber diafiltration cartridge at pages 54 and 16; and claim 6 by the feed tank disclosed in Fig. 6 on page 16.

Again, Applicants maintain that even if the Amicon Brochure: Re Spiral Wound/Hollow Fiber System and the Møller disclosures are combined, the combination does not disclose a system comprising a reaction vessel comprises a protein and a reactant for modification and/or conjugation thereof.

Therefore, Applicants assert that the combination of the disclosures of the Amicon Brochure: Re Spiral Wound/Hollow Fiber System and U.S. Patent 5,260,605 to Møller fails to reach the invention of claims 1, 5 and 6, and must be withdrawn.

Time of Transmittal of Response to Office Action

This Response is being filed under 37 C.F.R. §1.121 in response to a first Office Action. Applicants believe that no fee is due. However, if any fee is required, the Commissioner is authorized to charge such fee to Deposit Account No. 23-1703.

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Respectfully submitted,



Algis Anilionis, Ph.D.
Reg. No. 36,995

Customer No. 007470
White & Case LLP
Direct Dial: (212) 819-8428